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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,248	11/28/2003	Richard Phillips		1635

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EXAMINER

JENKINS, DANIEL J

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/724,248

Applicant(s)

PHILLIPS ET AL.

Examiner

Daniel J. Jenkins

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 11-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-10, drawn to a method of making a sintered metal body, classified in class 419, subclass 38.
- II. Claims 11-20, drawn to a powder metal product, classified in class 75, subclass 246.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by a materially different process such as hot isostatic pressing.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mr. Francis Hand on 5/12/05 a provisional election was made with traverse to prosecute the invention of I, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-20

are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill in view of Ozaki et al.

Hill discloses the invention substantially as claimed. Hill discloses a process comprising:

- mixing a ferrous metal powder (col. 2, line 54) with a lubricant (col. 3, lines 52-62) to form a mixture;

- compacting the mixture at a pressure of 10-40 tons/sq.in.; and

- heating the compacted mixture at a temperature of 1850-2400oF to liquid phase sinter the compact to form a sintered metal body (col. 3, line 63-col. 4, line 10).

However, Hill does not disclose lauric acid as a member of the lubricant, but discloses that conventional lubricants can be used in the invention (col. 3, lines 56-57).

Ozaki et al. teaches that the lubricant can include lauric acid (col. 5, lines 3-4) in the same field of invention for the purpose improving the flowability of the mixture.

Ozaki et al. further teaches that Ni and B powders can be added to iron based powder mixtures to form desired alloying effects of these known alloy components.

It would have been obvious to one having ordinary skill in the art to use the lubricant of Ozaki et al. which includes lauric acid in the invention of Hill in order to improve the flowability of the mixture, and to add Ni and/or B powders to improve the alloy characteristics of the formed iron based material.

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Hill discloses processing parameters of pressure and temperature that significantly overlap those as claimed, establishing a prima facie case of obviousness (see MPEP 2131.03).

9. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill in view of Luk et al.

Hill discloses the invention substantially as claimed. Hill discloses a process comprising:

mixing a ferrous metal powder (col. 2, line 54) with a lubricant (col. 3, lines 52-62) to form a mixture;

compacting the mixture at a pressure of 10-40 tons/sq.in.; and

heating the compacted mixture at a temperature of 1850-2400oF to liquid phase sinter (col. 3, line 11) the compact to form a sintered metal body (col. 3, line 63-col. 4, line 10).

However, Hill does not disclose lauric acid as a member of the lubricant, but discloses that conventional lubricants can be used in the invention (col. 3, lines 56-57).

Luk et al. teaches that the mixture can include lauric acid (col. 3, line 40) and graphite (col. 3, line 11) in the same field of invention for the purpose improving the flowability of the mixture.

The Examiner notes that the designation of the lauric acid as a lubricant component in the claims and that of Luk et al. to designate the lauric acid component as a binder component does not provide a patentable distinction.


It would have been obvious to one having ordinary skill in the art to use the lubricant of Luk et al. which includes lauric acid and graphite in the invention of Hill in order to improve the flowability of the mixture.

Hill discloses processing parameters of pressure and temperature that significantly overlap those as claimed, establishing a prima facie case of obviousness (see MPEP 2131.03).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Jenkins whose telephone number is 571-272-1242. The examiner can normally be reached on M-TH6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1242. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel J. Jenkins
Primary Examiner
Art Unit 1742